## T··Mobile···

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July 7, 2016

## SUBMITTED ELECTRONICALLY VIA ECFS

Ms. Marlene H. Dortch Secretary Federal Communications Commission 445 12<sup>th</sup> Street, NW Washington, DC 20554

Re: Notice of Ex Parte Presentation

GN Docket No. 14-177, Use of Spectrum Bands Above 24 GHz for Mobile Radio Services

Dear Ms. Dortch:

On July 5, 2016, I spoke separately by telephone to Johanna Thomas, legal advisor to Commissioner Rosenworcel, Brendan Carr, legal advisor to Commissioner Pai, and Erin McGrath, legal advisor to Commissioner O'Rielly. On July 6, 2016, I spoke by telephone to Daudeline Meme, legal advisor to Commissioner Clyburn. Each telephone call covered the above-referenced proceeding. I noted T-Mobile's strong support for the Commission's efforts to make additional spectrum available in the millimeter wave bands for Fifth Generation ("5G") wireless broadband technologies. However, I expressed concern that, in trying to address competing interests, the Commission's apparent decision falls short of maximizing the opportunity to drive investment and leadership in 5G technology development and deployment. Accordingly, I urged that the Commission take a different approach on certain important issues from that announced in the Fact Sheet describing the draft Report and Order and Further Notice of Proposed Rulemaking ("FNPRM") in this proceeding.<sup>1/</sup>

The points I covered were the same as those in the telephone conference Steve Sharkey, Vice President, Government Affairs Technology and Engineering Policy, T-Mobile US, Inc. and I had with Edward Smith, legal advisor to Chairman Wheeler, on June 28, 2016 and which are fully reflected in the *ex parte* letter we submitted covering that telephone conference. <sup>2</sup>/ By way of summary, T-Mobile's positions, expressed in that letter, are as follows:

Fact Sheet: Spectrum Frontiers Proposal to Identify, Open Up Vast Amount for New High-Band Spectrum for Next Generation (5G) Wireless Broadband, Federal Communications Commission (rel. Jun. 23, 2016), http://transition.fcc.gov/Daily\_Releases/Daily\_Business/2016/db0623/DOC-339990A1.pdf ("Fact Sheet").

T-Mobile *Ex Parte*, GN Dkt. No. 14-177 (filed June 30, 2016).

Satellite Sharing – The Commission should, consistent with the framework outlined by CTIA, not further constrain exclusive licensed access to the spectrum by further expanding access to the 28 and 37/39 GHz bands by satellite operators.<sup>3/</sup> T-Mobile has supported an approach that allows satellite operations to continue and expand in the band while ensuring that terrestrial operators are able to aggressively deploy service, particularly in the major urban areas.<sup>4/</sup> It is critical that the Commission not undermine the utility of the terrestrial licensed spectrum by granting satellite operators extensive rights, particularly in the major markets, to deploy systems that will interfere with or add uncertainty to the terrestrial operations. At 39 GHz, the Commission should adhere to the previously adopted soft segmentation approach.<sup>5/</sup> If it deviates from that, the Commission should also revisit whether terrestrial operations should be permitted in the 40-42 GHz band.

37-37.6 GHz Band – The Commission should not make this band available under a license-by-rule approach, which will effectively mean the band will be used on an unlicensed basis. A license-by-rule approach will unnecessarily restrict the amount of (currently unused) spectrum that will be available for licensed operations in the millimeter wave bands, potentially limiting the ability of new entrants to take advantage of the promise of 5G operations using millimeter wave spectrum. The 37-37.6 GHz band represents an opportunity to make unencumbered millimeter wave spectrum available to new band entrants. Designating that spectrum for a licensed-by-rule approach, however, would reduce the amount of spectrum available for auction by almost 40% – eliminating three 200 megahertz channels that could be auctioned and that would enhance competition among service providers.

**Licensed Spectrum Deficit** – The Commission should re-evaluate the division of spectrum between licensed and unlicensed use. Licensed operations are at the core of the 5G vision. Making spectrum available for licensed services in the 64-71 GHz band will provide the certainty necessary to promote the investment in equipment development and device innovation that will benefit users of both licensed and unlicensed segments of the band. Moreover, the Commission should allocate the majority of the spectrum identified for evaluation in the anticipated FNPRM on an exclusive, licensed basis. The FNPRM should also consider other bands not necessarily mentioned in the Fact Sheet, including the 40-42 GHz band.

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See CTIA Ex Parte, GN Dkt. No. 14-177, et al. (filed May 20, 2016) (proposing a framework that would maintain primary status for terrestrial use of the 28 GHz and 37-40 GHz bands, while enabling existing FSS users some protections without elevating their existing allocation rights).

T-Mobile *Ex Parte*, GN Dkt. No. 14-177, at 4 (filed May 17, 2106) (discussing CTIA framework for the 28 GHz band); T-Mobile *Ex Parte*, GN Dkt. No. 14-177, at 6-7 (filed June 20, 2106) (discussing satellite operations in the 28 and 37/39 GHz bands).

See U.S. Table of Frequency Allocations, 47 C.F.R. § 2.106; Allocation and Designation of Spectrum for Fixed Satellite Services in the 37.5-38.5 GHz, 40.5-41.5 GHz and 48.2-50.2 GHz Frequency Bands, Allocation of Spectrum to Upgrade Fixed and Mobile Allocations in the 40.5-42.5 GHz Frequency Band, Allocation of Spectrum in the 46.9-47.0 GHz Frequency Band for Wireless Services, and Allocation of Spectrum in the 37.0-38.0 GHz and 40.0-40.5 GHz for Government Operations, Second Report and Order, 18 FCC Rcd. 25428, ¶¶ 23- 24 (2003).

**Spectrum Aggregation** – The Commission should adopt the approach to spectrum aggregation in the millimeter wave bands proposed by the Competitive Carriers Association ("CCA"). (CCA proposed that the Commission provide enhanced review for any acquisition of spectrum that would result in the licensee holding more than one-third of the available high-band spectrum or more than one-half of the high-band spectrum in a particular frequency band. First, the CCA approach more accurately reflects the amount of spectrum that will be available for use on a licensed basis. Second, the proposed two-tier approach recognizes that the various millimeter wave bands are not necessarily fungible. Finally, an in-band screen would also require the Commission to more thoroughly evaluate transactions where an entity proposes to acquire nearly the all the spectrum in a band – as Verizon might if it exercises its option to acquire XO's 28 GHz spectrum. (S)

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Pursuant to Section 1.1206(b)(2) of the Commission's rules, an electronic copy of this letter is being filed for inclusion in the above-referenced docket and copy of this letter has been sent to members of the Commission staff with whom I spoke. Please direct any questions regarding this filing to the undersigned.

Respectfully submitted,

/s/ John Hunter

John Hunter Senior Director, Technology and Engineering Policy

Letter from Steve B. Sharkey, Vice President, Government Affairs Technology and Engineering Policy, T-Mobile, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-177, at 2 (filed June 20, 2016); see Letter from Rebecca Murphy Thompson, EVP & General Counsel, Competitive Carriers Association, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-177, et al. (filed June 15, 2016) ("CCA Ex Parte Letter"). The Commission asked in the Notice of Proposed Rulemaking (1) whether it should adopt band-specific spectrum holding limits for the licensing of the millimeter wave bands, either for individual bands or a combination of the bands; and (2) whether it should include the millimeter wave bands in the spectrum screen currently applied to secondary market transactions. See Use of Spectrum Bands Above 24 GHz For Mobile Radio Services, et al., Notice of Proposed Rulemaking, 30 FCC Rcd. 11878, ¶¶ 191-92 (2015).

CCA Ex Parte Letter at 2.

XO Holdings and Verizon Communications filed a series of applications to transfer various authorizations to Verizon, and Nextlink Wireless filed applications to lease its 28 GHz and 39 GHz authorizations to Verizon, which will provide Verizon with access to a substantial amount of spectrum. See Consolidated Applications to Transfer Control of Domestic and International Section 214 Authorizations, WC Docket No. 16-70 (filed Oct. 30, 2015); Applications of Cellco Partnership Verizon Wireless and Nextlink Wireless, LLC, Description of Transaction and Public Interest Statement, ULS File No. 0007162285 (explaining that under the terms of a purchase agreement, XO Holdings, the parent of Nextlink, granted Verizon the option to purchase all of Nextlink's interests).

cc: (via e-mail)

Johanna Thomas Brendan Carr Erin McGrath Daudeline Meme